Automotive Technology 7th Edition
Chapter 43
Multiple Choice Quiz B

Name: _____ Date: _____

1. When a capacitor is placed in a closed circuit, what happens to the voltage source?
A. It decreases.
B. It remains constant.
C. It forces electrons around the circuit.
D. It gets discharged.

2. What is the primary function of a capacitor in noise filtering?
A. To amplify the noise.
B. To store the noise.
C. To block the flow of direct current (DC).
D. To allow AC to pass.

3. The larger the surface area of the plates of a capacitor, the _____ the capacitance.
A. Smaller
B. Greater
C. Unchanged
D. More variable

4. What happens when a capacitor is electrically charged in a computer memory?
A. It represents the binary digit 0.
B. It represents the binary digit 1.
C. It erases the memory.
D. It amplifies the signal.

5. In what type of memory is a capacitor primarily used?
A. Static random-access memory (SRAM)
B. Read-only memory (ROM)
C. Dynamic random-access memory (DRAM)
D. Flash memory

6. What is the primary purpose of the dielectric in a capacitor?
A. To conduct electricity between the plates.
B. To store electrical charge.
C. To insulate and prevent the flow of electricity between the plates.
D. To amplify the current.

7. When a capacitor is placed in a circuit, and the voltage source forces electrons around the circuit, what happens to the electrons?
A. They flow through the dielectric.
B. Excess electrons collect on the negatively charged plate.
C. They get neutralized.
D. They get stored in the battery.

8. What was the primary discovery made using the Leyden jar?
A. A charge could be stored for a period of time.
B. Electricity could be amplified.
C. Resistance could be measured.
D. Voltage could be increased.

9. In a capacitor, what happens when the negative plate and the negative terminal of the battery are at the same negative potential?
A. The circuit is in balance, and there is no current.
B. The circuit gets short-circuited.
C. The capacitor discharges.
D. The capacitor gets damaged.

10. What is the primary purpose of a capacitor in timer circuits?
A. To amplify the current.
B. To store energy and allow it to discharge through a resistance load.
C. To block the flow of current.
D. To act as a switch.

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Answer Key

1. C

2. D

3. B

4. B

5. C

6. C

7. B

8. A

9. A

10. B